

REMARKS

The examiner acknowledged that Applicant's amendments overcame the objections made to claims 16-17, 20, 36-37, and 40.

Applicant will address the examiner's response to applicant's arguments in the context of addressing the rejections, as set forth below:

35 U.S.C §112

The examiner rejected Claims 16, 17, 20, 36, 37, and 40 under 35 U.S.C. 112, second paragraph, as being indefinite.

Applicant has amended claims 16, 17, 20, 36, and 40 to overcome this rejection.

35 U.S.C § 102

The examiner rejected Claims 1-8, 12, 14-15, 17-28, 32, 34-35, 37-46, 51-55, 57-61, 63-73 under 35 U.S.C. 102(b) as being anticipated by Jones et al (2002/0111935).

The examiner argues that

As per claims 1, 21.
Jones et al ('935) discloses:
receiving trip segments, see figure 3 (300);
determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306);
generating itineraries from flights using the constraints, see (310); and
pricing the itineraries, see figure 6 (600).

Claim 1 and by analogy claim 21 are allowable over Jones because Jones neither describes nor suggests "... determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights ... , as set forth in claim 1."

The examiner contends that the features of "determining constraints" is disclosed in (302), and now (306) which are found in FIG. 3.

Applicant disagrees. In 302, Jones describes finding desirable (e.g., best or lowest) fares between the input departure city and input arrival city, whereas, in step 306 Jones describes that: "obtain rules and restrictions associated with the best fares." Nowhere in the cited passages from Jones, nor elsewhere in Jones however does Jones describe or suggest "determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights." At the passages cited by the examiner, Jones determines segments of the trip and tests the fares to make sure that the fares can be used between the segments. However, Jones does not determine any properties of fares, nor uses constraints derived from those properties in the process of generating itineraries.

In addressing Applicant's prior remarks, the examiner stated:

4. Applicant argues on page 14 of the remarks with respect to claims 1 and 21 that "Jones determines segments of the trip and finds fares that can be used between the segments" but does not "determine any properties of fares, nor uses constraints derived from those properties in the process of generating itineraries." This is unpersuasive because the plain meaning of the term "constraint" is a restriction. Jones teaches in ¶ 0048 that "the system reviews rules and restrictions . . . to find allowable travel dates for the best fares that comply with the rules and restrictions . . ."

Jones states in part, "[0048] Owing to the multitude of rules and restrictions associated with travel carriers, the system reviews rules and restrictions (step 306) to find allowable travel dates for the best fares that comply with the rules and restrictions (step 308). Step 306 may be implemented by querying the fare portion of the relational database for rules and restrictions related to the best fares. ... " However, this is not relevant to Applicant's claim 1, because the claim requires that "determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, generating itineraries from flights using the constraints." That is, while Jones reviews rules and restrictions to find the travel dates for the best fares, this occurs during determination of the fares.

In contrast, claim 1 requires determining constraints on sequences of flights between the endpoints of the trip segments and thus generating itineraries from flights using the constraints. This feature is occurring at the point of producing itineraries, e.g., the flight segments between points in the trip, not the fares that will later be associated with the itineraries to provide pricing solutions.

Accordingly, Jones neither describes nor suggests claim 1.

Claims 2-15, 22-35, 42-50, 52-56, and 58-62

Each of claims 2-15, 22-35, 42-50, 52-56, and 58-62 require that the claimed constraints be on a particular feature involved in travel planning. Each of the claims are allowable for reasons discussed in their respective base claims and because the claimed feature of a constraint is neither described nor suggested by the cited reference.

Claim 2

Using claim 2 as just one example, claim 2 requires that “the constraints are on flights.” The examiner contends: “Jones et al ('935) further discloses the constraints are on flights, see figure 5 (Flights).”

Figure 5 of Jones does not show constraints on flights. Rather, Figure 5 shows constraints on the user query. In claim 2, the recited constraints are derived from properties of fares that can be used with the flights. Jones does not describe deriving anything corresponding to the claimed constraints from properties of the fares useable with the flights.

In response to Applicant's argument, the examiner stated: “5. Applicant argues on page 14 of the remarks with respect to claim 2 that “Jones does not show constraints on flights. Rather, Figure 5 shows constraints on the user query.” This is unpersuasive because the user queries themselves are on flights.” While, it is true that the user query is for flights, that is not relevant to the claimed feature that of: “determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights ...,” as set forth in claim 1 and the feature of claim 2 that “the constraints are on the flights.” Claim 2 requires that the method view constraints on flights between the endpoints of the trip in order to generate the itineraries. This is not disclosed by Jones.

Claims 14 and 34

Using claim 14 as another example, claim 14 requires that the “constraints are restrictions on flight origin and destination.” The examiner contends that: “Jones et al ('935) further discloses the constraints are restrictions on origin and destination, see (0037) and (0043).”

Claim 14 is neither described nor suggested by Jones. Both of these passages from Jones are reproduced below.

[0037] Relational database 14 is also connected to connect point interface 18. Connect point interface 18 serves to pare down possible connection points between travel segments from those that are merely possible to those that are reasonable. For example, when one is attempting to book a flight from Dallas to Chicago, one may possibly connect on a flight in Cairo, Egypt. However, connect point interface 18 would exclude such an unreasonable connection. Nevertheless, connect point interface 18 would allow a reasonable connection, such as one made in St. Louis, Mo. Those skilled in the art will appreciate that an implementation of connect point interface 18 may be empirically developed using heuristics and experience, and the interface may comprise, for example, a table of city pairs linked by allowable connection points.

[0043] Again with reference to FIG. 2, several other data feeds feed a fare portion 14B of database 14. These other data feeds comprise fare data 222 and rules 224. Fare data feed 222 represents the fares that can be applied to various flights, and rules data feed 224 represents the rules for applying fares to various flights. Routing rules 226 place restrictions on the cities and routes that may be used for planning an itinerary. Finally, flight applicability data 228 qualify the application of certain fares to the various cities and routes. Flight applicability data 228 typically comprise data from travel providers denoting restrictions on applying certain fares to certain flights.

Recalling that base claim 1 requires: “determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights; and generating itineraries from flights using the constraints,” Applicant contends that the passages do not suggest: “constraints are restrictions on flight origin and destination,” as used in claim 14 when read with claim 1.

This follows because Jones neither at those passages nor elsewhere determines constraints, as claimed. Rather, these passages cited from Jones describe a “Connect point interface 18.” However, the connect point interface 18 “serves to pare down possible connection points between travel segments from those that are merely possible to those that are reasonable.” These are not constraints derived from “properties of fares that can be used with the flights.” Indeed, at that passage, the example that Jones uses, namely: “For example, when one is attempting to book a flight from Dallas to Chicago, one may possibly connect on a flight in Cairo, Egypt.” Exclusion of that connect point is not based on any property of a fare that can be used with a flight, but rather that the connection for a flight through Cairo is an “unreasonable connection.”

Similarly, in paragraph [0043], Jones does not determine constraints, as claimed. Rather, Jones describes data feeds, e.g., fare data 222, rules 224, routing rules 226 and applicability data 228. These are all data feeds supplied from, e.g., ATPCO. Indeed, ATPCO may be a source of some of the raw data used by a travel planning system to determine some of the features recited in Applicant's claims, but nothing in these feeds correspond to: "determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights." In addition, does Jones neither describes nor suggests to use any of these feeds to determine the claimed constraints. Therefore, Jones inherently neither describes nor suggests "constraints are restrictions on flight origin and destination."

In addressing Applicant's remarks, the examiner stated:

6. Applicant argues on page 15 of the remarks with respect to claims 14 and 34 that "Jones neither at those passages nor elsewhere determines constraints, as claimed." This argument is unpersuasive for the reasons stated above with respect to claims 1 and 21. Applicant further argues on page 16 of the remarks that in ¶ 0043 Jones "neither describes nor suggests 'constraints are restrictions on flight origin and destination.'" However, this cited paragraph of Jones explicitly states: "Routing rules 226 place restrictions on the cities and routes that may be used for planning an itinerary" (emphasis added). Therefore, this argument is unpersuasive because the teachings at least in IJ 0043 of the reference meet the plain meaning of the actual language used in the claim, and applicant has not clearly and distinctly pointed out any deficiencies with respect to this particular teaching.

The examiner in the remarks above acknowledges that: "'Routing rules 226 place restrictions on the cities and routes that may be used for planning an itinerary" (emphasis added)." Jones' discussion pertaining to routing 226 is reproduced below:

[0043] Again with reference to FIG. 2, several other data feeds feed a fare portion 14B of database 14. These other data feeds comprise fare data 222 and rules 224. Fare data feed 222 represents the fares that can be applied to various flights, and rules data feed 224 represents the rules for applying fares to various flights. Routing rules 226 place restrictions on the cities and routes that may be used for planning an itinerary. Finally, flight applicability data 228 qualify the application of certain fares to the various cities and routes. Flight applicability data 228 typically comprise data from travel providers denoting restrictions on applying certain fares to certain flights.

Nothing in this excerpt or elsewhere in Jones suggests using routing rules 226 with determining constraints on sequences of flights between the endpoints of the trip segments, the

constraints derived from properties of fares that can be used with the flights ... , as set forth in claim 1, and therefore nothing in Jones suggests using this constraint on "flight origin and destination," for claim 14 in generating itineraries from flights using the constraints, as called for in claim 1.

Claims 16, 17, 20, 36, 37 and 40

Each of claims 16, 17, 20, 36, 37 and 40 require generating additional itineraries without considering constraints. Each of the claims are allowable for reasons discussed in their respective base claims and because the combination of claimed features is neither described nor suggested by the cited reference.

Using claim 16, as an example, claim 16 calls for "... generating additional itineraries from flights without considering the constraints."

The examiner contends that: "Jones et al ('935) further discloses pricing of itineraries without considering constraints, see figure 3 (302)."

Applicant generally agrees with this statement. Indeed, at 302 Jones does not consider nor indeed produce "constraints derived from properties of fares that can be used with the flights." Therefore, Jones does price itineraries without considering "constraints derived from properties of fares that can be used with the flights," since Jones does not consider the claimed constraints per se. However, claim 16 depends from claim 1, which also includes the features of determining constraints ... generating itineraries from flights using the constraints, and pricing the itineraries. It is submitted that Jones 302 cannot be reasonably construed to teach both pricing of itineraries without considering the constraints and pricing of itineraries considering the constraints.

Therefore, Jones, while clearly describing pricing of itineraries without considering the constraints, does not describe the combination of pricing itineraries considering the constraints and pricing of itineraries without considering the constraints, as now explicitly called for in amended claim 16.

The examiner responds to Applicant's prior argument as follows:

7. Applicant's argues on pages 16-17 of the remarks with respect to the rejection of claims 16, 17, 20, 36, 37, and 40 that "Jones 302 cannot be reasonably construed to teach both pricing of itineraries without considering constraints and pricing of itineraries considering restraints." This argument is unpersuasive because Jones teaches the claimed limitations of amended claims 16, 20, 36, and 40 (as well as unamended dependent claims 17 and 37) at least also at ¶ 0060; wherein Jones discloses generating additional itineraries without considering previous constraints on date, airline, etc. Furthermore, as stated below in the rejection under § 112, second paragraph, it is unclear what relationship these constraints not considered for the additional itineraries have, if any, with the constraints considered for the original itineraries.

Applicant has now amended claim 16 and the other claims to overcome the 112, second paragraph rejection and therefore there is no ambiguity. Paragraph [0060] is reproduced below:

[0060] If the user does not wish to travel on the 90 days worth of calendar days displayed by calendar 704, the user may click on calendar scroll icons 718 to move forward or backward in the time period displayed, as desired. Moreover, the user may click on hyperlink 720 to either try a different airline or another low fare, or to get the specific travel date the user desires.

No teaching in [0060] suggests the feature of "generating additional itineraries from flights without considering the constraints." For the reasons discussed above, Jones does not suggest determining constraints ... generating itineraries from flights using the constraints, and pricing the itineraries with and without considering the constraints. Jones cannot support both types of pricing.

Claims 18, 19, 38 and 39 are allowable at least for the reasons discussed in claim 1.

Claims 41, 63 and 68, which require instructions to: "determine constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights and generate itineraries from flights using the constraints, are neither described nor suggested by Jones for the reasons discussed above in conjunction with claim 1.

Claims dependent on claim 41 or 63 or 68 are allowable at least for the reasons discussed in claim 1 and/or for additional reasons, as discussed in corresponding dependent claims for claim 1.

Claims 51 and 57

Claim 51 further distinguishes over Jones et al ('935) since the reference neither describes nor suggests instructions to: "determine geographic and airline constraints derived from fare rules to control the manner in which flights are combined prior to evaluation of fare rules." The examiner again relies on item (302) from Jones to teach this feature. However, as already discussed, Jones does not derive or determine constraints derived from fares. Therefore, Jones fails to determine constraints derived from fare rules and fails to suggest: "determine geographic and airline constraints derived from fare rules," as claimed.

Claim 57 contains analogous limitations and is allowable for analogous reasons.

Claim Rejections - 35 U.S.C. §103

The examiner rejected Claims 9, 13, 29, 33, 47, 50, 56, 62 under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of Tanner (WO 01/59590).

The examiner also rejected Claims 10, 30, 48 under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of official notice.

The examiner contends that:

Official Notice was taken and considered admitted prior art that it is old and well known in the travel arts to add a new airline product to increase offerings to customers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace.

Claim 10 requires that the "constraints are based on fare global indicator." While "to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace," may be known, the claim requires that the constraints are based on a fare global indicator, which the examiner has not shown would be well know to modify Jones, because Jones does not teach constraints, as claimed and argued above.

The examiner also rejected Claims 11, 31, 49 under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of the Travel Gazette.

Each of these claims are allowable over any combination of Jones, Tanner, Travel Gazette and official notice, at least because no combination of these claims describes or suggests

the features of, e.g., "determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights and generating itineraries from flights using the constraints," as set forth in the base claims.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing, applicant submits that the application is in condition for allowance and such action is requested at the examiner's earliest convenience.

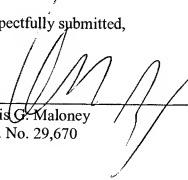
All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable. Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

No fee is believed to be due. If a fee is due, please apply that fee and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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